

Suggested Procedures for Designers Using the Wisconsin Commercial Building Code (Comm 61-65)

1. Determine if project is within scope of code per sections Comm 61.02 and 61.03. Review the submittal requirements of Comm 61.30 or Comm 61.70(5).
2. Determine applicable building occupancies present; see International Building Code chapter 3 for descriptions. The adopted IBC provisions of the Wisconsin Commercial Building Code are also found in the Wisconsin Enrolled Building Code. The plan review application form, SBD-118, reflects each occupancy type and the major occupancy use of the building. If multiple occupancies are found in the building, document how each is separated or not separated on the *Multiple Occupancy Worksheet*, or provide complete information on the plans, or clearly show equivalent information on your own worksheets showing design intents. If any hazardous materials are to be used/stored in the building, clearly indicate the locations by using *Control Area Worksheets*, or your equivalent worksheet, or notes on plans submitted.
3. Use method a. or b. to determine allowable building area/height and class of construction:
 - a. Variable Class of Construction Method - Based on desired area, height, fire department access, occupant capacity, and sprinkler protection; determine minimum class of construction using occupancy and construction requirements. In some cases, by building a two-, three-, or four-hour fire wall; a larger structure may be constructed, as you may treat each as a separate building per IBC 503.1. See Table 503 and IBC 506.1 for table limit adjustments permitted.
OR
 - b. Fixed Class of Construction Method: Based on desired class of construction, see classes of construction (list on a following page) and IBC section 602 for descriptions. Select desired area, height, fire department access, occupant capacity, and sprinkler protection based from the combinations allowed by occupancy and construction requirements.
4. Design building components based on class of construction requirements of IBC section 602 and general construction requirements of the IBC code. This includes checking the amount of protected and unprotected exterior wall openings meets the limitations, which can be done with the Exterior Wall Opening Worksheet.
5. Check specific requirements of applicable occupancy in IBC chapter 4 and reference general IBC chapters 5-16 and 18-34 as needed. Clearly show code compliance on the submittal documents - plans, specifications, and calculations.

6. Worksheets that can assist you in finding occupant sensitive type information are: *Design Occupant Load Worksheet*, *Exit Width Determination Worksheet*, *Structural Design Worksheet*, *Lateral Load Resisting Systems and Connections Worksheet*, and *Sanitary Fixture Determination Worksheet*.
7. Check other general requirements of IBC chapters 2 to 34, including, but not limited to:
 - Incidental Use Areas: Table 302.1.1
 - Occupancy Separations: Table 302.2
 - Hazardous Materials: Tables 307.7(1), 307.7(2), 414.2.2 & 414.2.4
 - Fire resistance ratings and penetrations: chapter 7
 - Interior finishes: chapter 8
 - Fire Protection Systems: chapter 9
 - Windows and Fire Dept. Access: 903.2.12
 - Exiting: chapter 10
 - Accessibility: Comm 62.1100
 - Interior Environment: chapter 12
 - Exterior Walls: chapter 14
 - Roof and Penthouses: chapter 15
 - Structural: Chapters 16, 18–23
 - Glass and Glazing: chapter 24
 - Gypsum Board and Plaster: chapter 25
 - Plastics (foam and light-transmitting): chapter 26
 - Sanitary Facilities: chapter 29
 - Special Construction: chapter 31
8. Check efficiency requirements for building envelope energy performance in chapter Comm 63 and IECC and lighting power limits, Comm 63.1040 to 63.1053.
9. Check the HVAC requirements of Comm 64 and 65 and adopted portions of the International Mechanical Code and International Fuel Gas Code, including the equipment efficiency requirements of sections Comm 63.1020 to 63.1032. *Combustion Air Sizing Worksheet* and *Outdoor Air Ventilation Worksheet* can help to assure code compliant design.
10. These steps will vary subject to individual occupancies, construction type, and design criteria based on materials used in the building.